

Docket No. AUS920030470US1

CLAIMS:

What is claimed is:

1. A method in a data processing system for
5 transferring data from a memory to a network adapter, the
method comprising:
 receiving a request to transfer data in the memory
 to a network adapter; and
 setting a transfer size to align the data with a
10 cache line size if the amount of data to be transferred
is unequal to the cache line size, wherein an amount of
data is less than or equal to the transfer size.
2. The method of claim 1, wherein the amount of data to
15 be transferred is in a frame and has a frame size.
3. The method of claim 1, wherein a valid length
indicator is set to the amount of data and wherein the
network adapter outputs only the amount of data set by
20 the valid length indicator after the data has been
transferred to the network adapter.
4. The method of claim 1, wherein the cache line size
is 2^n , wherein n is a positive integer.
- 25 5. The method of claim 1, wherein the data is
transferred from the memory to the network adapter
through a bridge chip.

Docket No. AUS920030470US1

6. A method in a data processing system for transferring data from a memory to a network adapter, the method comprising:

- identifying frame size for a transfer of the data
- 5 from the memory to the network adapter;
- setting a length equal to a cache line size;
- if the frame size is divisible by a cache line size without a remainder, setting a valid data length equal to the length field; and
- 10 if the frame size divided by the cache line size results in a remainder, setting the length field to align the data with the cache line size.

7. The method of claim 6, wherein the step of setting
15 the length comprises:

setting the length field as follows:

$$\text{length field} = (\text{ABS}(\text{frame size}/\text{CLS}) + 1) * \text{CLS},$$

wherein CLS is the cache length size.

20 8. The method of claim 6 further comprising:

initiating a transfer of the data from the memory to the network adapter using the valid data length and the length, wherein the network adapter only outputs data identified by the valid data length.

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9. A means in a data processing system for transferring data from a memory to a network adapter, the data processing system comprising:

Docket No. AUS920030470US1

receiving means for receiving a request to transfer data in the memory to a network adapter; and

5 setting means for setting a transfer size to align the data with a cache line size if the amount of data to be transferred is unequal to the cache line size, wherein an amount of data is less than or equal to the transfer size.

10 10. The data processing system of claim 9, wherein the amount of data to be transferred is in a frame and has a frame size.

15 11. The data processing system of claim 9, wherein a valid length indicator is set to the amount of data and wherein the network adapter outputs only the amount of data set by the valid length indicator after the data has been transferred to the network adapter.

20 12. The data processing system of claim 9, wherein the cache line size is 2^n , wherein n is a positive integer.

25 13. The data processing system of claim 9, wherein the data is transferred from the memory to the network adapter through a bridge chip.

14. A means in a data processing system for transferring data from a memory to a network adapter, the data processing system comprising:

Docket No. AUS920030470US1

identifying means for identifying frame size for a transfer of the data from the memory to the network adapter;

first setting means for setting a length equal to a
5 cache line size;

second, setting means for setting a valid data length equal to the length field if the frame size is divisible by a cache line size without a remainder; and

third, setting means for setting length field to
10 align the data with the cache line size if the frame size divided by the cache line size results in a remainder.

15. The data processing system of claim 14, wherein the first setting the length comprises:

15 means for setting the length field as follows:

length field = $(\text{ABS}(\text{frame size}/\text{CLS})+1)*\text{CLS}$,

wherein CLS is the cache length size.

16. The data processing system of claim 14 further
20 comprising:

initiating means for initiating a transfer of the data from the memory to the network adapter using the valid data length and the length, wherein the network adapter only outputs data identified by the valid data
25 length.

17. A computer program product in a computer readable medium for transferring data from a memory to a network adapter, the computer program product comprising:

Docket No. AUS920030470US1

first instructions for receiving a request to transfer data in the memory to a network adapter;

second instructions for setting a transfer size to align the data with a cache line size if the amount of
5 data to be transferred is unequal to the cache line size, wherein an amount of data is less than or equal to the transfer size.

18. A computer program product in a computer readable
10 medium for transferring data from a memory to a network adapter, the computer program product comprising:

first instructions for identifying frame size for a transfer of the data from the memory to the network adapter;

15 second instructions for setting a length equal to a cache line size;

if the frame size is divisible by a cache line size without a remainder, setting a valid data length equal to the length field; and

20 if the frame size divided by the cache line size results in a remainder, setting the length field to align the data with the cache line size.

19. A server data processing system for obtaining
25 cultural context information from a client, the server data processing system comprising:

a bus system;

a network adapter connected to the bus system;

a memory connected to the bus system, wherein the
30 memory includes a set of instructions; and

Docket No. AUS920030470US1

a processing unit connected to the bus system,
wherein the processing unit executes the set of
instructions to receive a request to transfer data in the
memory to the network adapter and set the transfer size
5 to align the data with the cache line size if the amount
of data to be transferred is unequal to the cache line
size, wherein the amount of data is less than or equal to
the transfer size.

10 20. A server data processing system for obtaining
cultural context information from a client, the server
data processing system comprising:
a bus system;
a network adapter connected to the bus system;
15 a memory connected to the bus system, wherein the
memory includes a set of instructions; and
a processing unit connected to the bus system,
wherein the processing unit executes the set of
instructions to identify the frame size for a transfer of
20 the data from the memory to the network adapter; set the
length equal to a cache line size; set the valid data
length equal to the length field if the frame size is
divisible by a cache line size without a remainder; and
set the length field to align the data with the cache
25 line size if the frame size divided by the cache line
size results in a remainder.